

USGS Event Report

Fifth Biennial National Water Quality Monitoring Conference, 2006

Report Writer: Joseph J. Kerski –
Geographer – USGS – Denver

Other USGS Participants: **Curtis Price, Sandy Williamson, Al Rea, Gary Rowe, and perhaps 200 others.**

Event Dates: 7-11 May 2006

Location: San Jose, California



Conference site for the 2006 NWQMC—the San Jose Convention Center. The conference web site is:

www.tetrattech.com/nwqmc06/

The National Water Quality Monitoring Council and its co-sponsors (including the USGS, EPA, the NALMS (North American Lake Management Society) and others) hosted the Fifth Biennial National Water Quality Monitoring Conference in San Jose, California during May 2006.

The agenda featured about 500 oral presentations, nearly 20 workshops and short courses, plenary speakers, discussion sessions, posters, and exhibits designed to promote networking and enhance technical knowledge. This conference was twice as large as the previous conference!



The theme of this conference was "Monitoring Networks—Connecting for Clean Water." The conference featured how different networks, including monitoring designs, information exchanges, and Internet tools, connect all of us working for clean water. Included in the conference were sessions that provided an expanded national forum for volunteer monitoring program coordinators to exchange information and build better networks.



Conference keynote speaker from the EPA addresses the attendees.



Attendance at this year's conference numbered around 860, including hydrologists, engineers, managers, computer scientists, and others involved with water quality monitoring.

The next NWQMC conference will be held in 2008.

The USGS was well represented at the conference. The conference planning committee accepted all 18 NAWQA-sponsored technical sessions into the final agenda. NAWQA personnel were also selected to give 37 talks in non-NAWQA technical sessions and 58 additional NAWQA abstracts were selected for posters. There were also 30 additional papers and posters that will be given by other

USGS staffpersons. Approximately 175 of the approved 498 abstracts were from the USGS. Our workshops included the roll out of the national monitoring network, assessing groundwater vulnerability through statistical and mechanistic methods, the capabilities and limitations of using real time data, and many more. Many of the attendees and exhibitors represented important partners in our USGS water programs.

Our USGS Spatial Data and Analysis Workshop



The workshop that Sandy Williamson, Curtis Price, and I gave was entitled "Using USGS Spatial Data to Analyze Water Quality." This workshop gave attendees experience and confidence in accessing and using water quality and geospatial data from the USGS. This was a hands-on, 3 hour session where we invited attendees to access data such as USGS real time water quality, the National Hydrography Dataset, the National Land Cover Dataset, and other data to characterize watersheds and spatially analyze water quality and related data sets

using GIS software. We focused on powerful tools and rich data sets with an emphasis on getting hydrologists quickly up and running with GIS software, data, and tools.

We received positive comments about our workshop and it was a pleasure to work with Sandy and Curtis. I learned much from them and I am very impressed with Sandy's team's new water web mapping site on <http://web1.er.usgs.gov/NAWQAMapTheme>.



Sandy Williamson leads attendees through accessing and downloading water quality data from the Internet.



Curtis Price explains how to conduct spatial analysis with USGS land cover, elevation, and hydrography data.



Joseph Kerski helps a workshop attendee with downloading and using the National Hydrography Dataset.



Curtis Price helps some of the attendees through one of the exercises we created.



We were thankful to have classroom assistance from other USGS staffpersons at our workshop, such as hydrologist Al Rea, above right.

Conference Exposition and Poster Session

The approximately 50 exhibitors may be categorized as government agencies and contractors with a water emphasis, including USGS, EPA, and others, nonprofit organizations, companies that manufacture and distribute water testing and other equipment, companies that conduct research and evaluation, book publishers, and professional associations.

The USGS exhibit featured over 30 feet of space, and was well-positioned at the front of the exhibit hall.



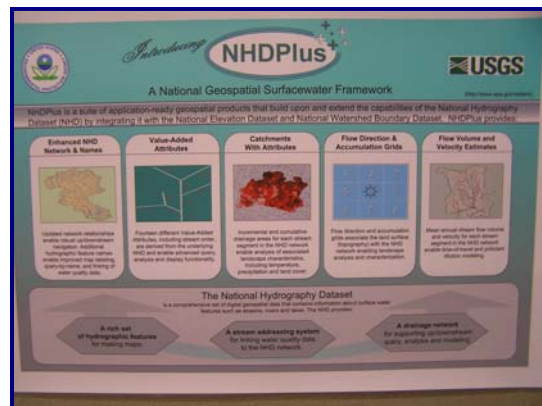
Rosemary Musson, Walton Low, Judy Griffin, and the rest of the USGS NAWQA staff presented new findings on the quality of the Nation's streams, lakes, and groundwater, and new tools to analyze these data temporally, statistically, and spatially. They distributed USGS research reports and fact sheets focusing on the water data that we provide and the results of hydrologic research.



This section of the USGS exhibit helped people navigate through the NAWQA Data Warehouse and the NWIS Web data.



The 100-plus item poster session demonstrated the dedication and innovativeness of people in the water quality profession.



One of my favorite new data sets is the NHD Plus; one of the posters about NHD Plus, above.



This above-water and underwater camera for examining life forms in the water that one exhibitor had on display was quite impressive!

Recommendations

This conference was an excellent opportunity to share successes, strategies, and lessons learned with a wonderfully diverse group of monitoring practitioners, who represented community, state, tribal, large-scale national and international water monitoring programs. The NWQMC conference is an opportunity to network with some of the country's smartest people who are doing work that literally affects all of us.

I believe that NWQMC is an excellent one to partner with in the future—not just at their

conferences, but all through the year.

Our USGS exhibit provided an excellent venue to network with attendees and other exhibitors.

As in other conferences that we participate in, the combination of exhibit and workshop is an excellent one. From the exhibit, we routed people to our workshop, and after the workshop, people made a point to visit our exhibit to ask us additional questions for the remaining conference days.



I took a field trip that included a stop at the California Aqueduct in the Central Valley.

When one realizes the infrastructure that we have invested as a society to bring water resources to agricultural, residential, commercial, and industrial users, and how those resources are constrained, one can more fully appreciate the important role that these water quality professionals have in our future.

-- End of Report --

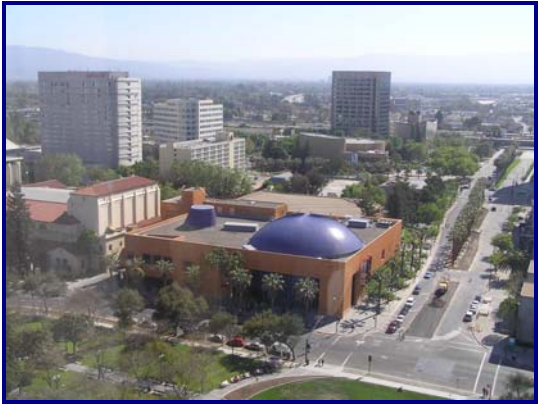


Vineyard in the San Joaquin Valley, irrigated in part from the California Aqueduct.

Acknowledgements

I wish to thank Curtis Price and Sandy Williamson for inviting me to teach with them at this event. I learned a great deal from them over the past few months as we prepared. I also learned from the USGS personnel whose papers and talks I attended at the conference.

I would like to thank Gary Rowe for all of his work on the conference planning team for this event and for funding my travel.



Fault lines, technology, palm trees, beautiful weather, and coastal ranges: San Jose, site of the 2006 NWQMC.